Docket No.: 428372000500

AMENDMENT

This listing of claims will replace all prior versions and listings of claims in the application:

In the Claims:

Claim 1 (currently amended): A compound of the formula:

$$R^{1} \xrightarrow{R^{2} - Ar^{1}(Alk^{1})_{r}L^{1}} R^{5}$$

$$(Alk^{2})_{m}C(R^{6})CH_{2}N(R^{a})Ar^{2}$$

$$R^{2} \xrightarrow{R^{3}} Ar^{1}(Alk^{1})_{r}L^{1}$$

$$(I)$$

wherein

Ar¹ is an aromatic or heteroaromatic group;

 R^1 , R^2 , R^3 , R^4 and R^5 which may be the same or different is each an atom or group $-L^2(Alk^3)_tL^3(R^7)_u$ in which L^2 and L^3 which may be the same or different is each covalent bond or a linker atom or group, t is zero or the integer 1, u is an integer 1, 2 or 3, Alk^3 is an aliphatic or heteroaliphatic chain and R^7 is a hydrogen or halogen atom or a group selected from alkyl, $-OR^8$, where R^8 is a hydrogen atom or an optionally substituted alkyl group, $-SR^8$, $-NR^8R^9$, where R^9 is as just defined for R^8 and may be the same or different, $-NO_2$, -CN, $-CO_2R^8$, $-SO_3H$, $-SOR^8$, $-SO_2R^8$, $-OCO_2R^8$, $-CONR^8R^9$, $-CSNR^8R^9$, $-COR^8$, $-OCOR^8$, $-N(R^8)COR^9$, $-N(R^8)CSR^9$, $-SO_2N(R^8)(R^9)$, $-N(R^8)SO_2R^9$, $-N(R^8)CON(R^9)(R^{10})$, where R^{10} is a hydrogen atom or an optionally substituted alkyl group, $-N(R^8)CSN(R^9)(R^{10})$ or $-N(R^8)SO_2N(R^9)(R^{10})$;

Alk¹ is an optionally substituted aliphatic or heteroaliphatic chain;

L¹ is a covalent bond or a linker atom or group;

Alk² is a straight or branched alkylene chain;

m is zero or an integer 1;

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R⁶ is a hydrogen atom or a methyl group:

r is zero or the integer 1;

R is a carboxylic acid (-CO₂H) or a derivative thereof;

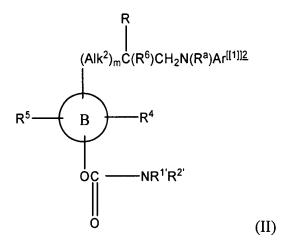
R^a is a hydrogen atom or a methyl group;

Ar² is an optionally substituted aromatic or heteroaromatic group;

B is a nitrogen containing heteroaryl group;

and a salt, solvate, hydrate or N-Oxide thereof and the salts, solvates, hydrates and N-Oxides thereof.

Claim 2 (currently amended): A compound of the formula:



wherein R, R^a, R⁵, R⁶, Alk², B, m and Ar² are as defined above and R¹ and R² are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, aryl, cycloalkyl, substituted cycloalkyl, heterocyclic, heteroaryl or R1' and R2', together with the nitrogen atom to which they are attached, are joined to form an optionally substituted heterocyclic ring; and a salt, solvate, hydrate or N-Oxide thereof-and the salts, solvates, hydrates and N-Oxides thereof.

Claim 3 (previously presented): The compound according to Claim 2, wherein R¹ and R² are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, cycloalkyl, substituted cycloalkyl, or R¹ and R², together with the nitrogen

atom to which they are attached, are joined to form an optionally substitute heterocyclic ring provided that said substituted alkyl, substituted alkenyl and substituted cycloalkyl do not carry an aryl, substituted aryl, heteroaryl or substituted heteroaryl group.

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Claim 4 (previously presented): A compound of the formula:

$$\begin{array}{c|c} & & & & \\ R^1 & & & & \\ R^2 & & & & \\ R^3 & & & & \\ & & & & \\ R^5 & & & & \\ \end{array}$$

wherein

Ar¹ is an aromatic or heteroaromatic group;

 R^1 and R^2 , R^3 , R^4 and R^5 which may be the same or different is each an atom or group $-L^2(Alk^3)_tL^3(R^7)_u$ in which L^2 and L^3 which may be the same or different is each a covalent bond or a linker atom or group, t is zero or the integer 1, u is an integer 1, 2 or 3, Alk^3 is an aliphatic or heteroaliphatic chain and R^7 is a hydrogen or halogen atom or a group selected from alkyl, $-OR^8$, where R^8 is a hydrogen atom or an optionally substituted alkyl group, $-SR^8$, $-NR^8R^9$, where R^9 is as just defined for R^8 and may be the same or different, $-NO_2$, -CN, $-CO_2R^8$, $-SO_3H$, $-SOR^8$, $-SO_2R^8$, $-OCO_2R^8$, $-CONR^8R^9$, $-OCONR^8R^9$, $-CSNR^8R^9$, $-COR^8$, $-OCOR^8$, $-N(R^8)COR^9$, $-N(R^8)CSR^9$, $-SO_2N(R^8)(R^9)$, $-N(R^8)SO_2R^9$, $-N(R^8)CON(R^9)(R^{10})$, where R^{10} is a hydrogen atom or an optionally substituted alkyl group, $-N(R^8)CSN(R^9)(R^{10})$ or $-N(R^8)SO_2N(R^9)(R^{10})$;

Alk¹ is an optionally substituted aliphatic or heteroaliphatic chain;

L¹ is a covalent bond or a linker atom or group;

Alk² is a straight or branched alkylene chain;

m is zero or an integer 1;

R⁶ is a hydrogen atom or a methyl group;

r is zero or the integer 1;

R is a carboxylic acid (- CO_2H) or a derivative thereof;

R^a is a hydrogen atom or a methyl group;

Ar² is selected from the group consisting of moieties of formula IIIa, IIIc, IIId, IIIe and IIIf:

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$$R^{5'}SO_2$$
 IIIa $R^{16'}$ $R^{16'}$ $R^{18'}$ IIIc

$$\mathbb{R}^{16'}$$

$$\mathbb{R}^{18'}$$

$$\mathbb{I}$$

$$\mathbb{I}$$

$$\mathbb{R}^{17'}$$

$$\mathbb{R}^{20'}$$

$$\mathbb{R}^{21'}$$

$$\mathbb{I}$$

$$\mathbb{I}$$

where R^{5'} is selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkenyl, aryl, substituted aryl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclic, substituted heterocyclic, heteroaryl and substituted heteroaryl;

R⁶ is selected from the group consisting of hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclic, substituted heterocyclic,

aryl, substituted aryl, heteroaryl, substituted heteroaryl, and -SO₂R¹⁰ where R¹⁰ is selected from the group consisting of alkyl, substituted alkyl, cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclic, substituted heterocyclic, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

R⁷ and R⁸ are independently selected from the group consisting of hydrogen alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heterocyclic and halogen;

R¹⁶ and R¹⁷ are independently selected form the group consisting of hydrogen, alkyl, substituted alkyl, alkoxy, substituted alkoxy, amino, substituted amino, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, heterocyclic, substituted heterocyclic and halogen; and

R¹⁸ is selected from the group consisting of alkyl, substituted alkyl, alkoxy, substituted alkoxy, amino, substituted amino, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, heterocyclic and substituted heterocyclic;

R²⁰ is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkoxy, substituted alkoxy, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heterocyclic and halogen;

R²¹' is selected from the group consisting of alkyl, substituted alkyl, alkoxy, substituted alkoxy, amino, substituted amino, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heterocyclic and substituted heterocyclic;

b is 1 or 2;

B is a nitrogen containing heteroaryl group; and <u>an enantiomer[[s]]</u>, <u>a</u> diastereomer[[s and]] <u>or a</u> pharmaceutically acceptable salt[[s]] thereof.

Claim 5 (original): A pharmaceutical composition comprising a pharmaceutically acceptable excipient and an effective amount of a compound according to any of Claims 1-4.

Claim 6 (original): A method for binding VLA-4 in a biological sample which method comprises contacting the biological sample with a compound according to any of Claim 1-4 under conditions wherein said compound binds to VLA-4.

Claim 7 (currently amended): A method for treating an inflammatory condition in a mammalian patient which condition is mediated by VLA-4 which method comprises administering to said patient a therapeutically effective amount of a pharmaceutical composition of Claim 6

Claim 5.

Claim 8 (canceled)

Claim 9 (new) The method according to Claim 7 wherein said inflammatory condition is selected from the group consisting of inflammatory arthritis, multiple sclerosis, allograft rejection, diabetes, inflammatory dermatoses, asthma and inflammatory bowel disease.

Claim 10 (new): The method according to Claim 7, wherein said inflammatory condition is asthma.

Claim 11 (new): A compound according to Claim 1, wherein

Ar¹ is an aryl or heteroaryl group;

 R^1 and R^2 are the same or different, selected from the group consisting of a halogen atom, a methyl group, a halomethyl group, a methoxy group, and a halomethoxy group; p. 22 [0061]

R³ is a hydrogen atom;

 $(Alk^1)_rL^1$ is -CONH-;

B is a nitrogen containing heteroaryl group selected from the group consisting of pyridyl, pyrrolyl, indolyl, pyridazinyl, pyrimidinyl, pyrazinyl, 1-oxo-1,2,5-thiadiazolyl and 1,1-dioxo-1,2,5-thiadiazolyl;

Alk² is absent or -CH₂-;

m is zero or the integer 1;

R is a carboxylic acid (-CO₂H);

R⁶ and R^a are each a hydrogen atom; and

Ar² is an optionally substituted monocyclic nitrogen-containing heteroaromatic group selected from the group consisting of pyridyl, pyrimidinyl, pyridazinyl and triazinyl groups.

Claim 12 (new): The compound of Claim 11, wherein

Ar¹ is a pyridinyl group; and

R1 and R2 are independently selected from the group consisting of fluorine, chlorine, -CF3, -CH $_2$ F, -OCF $_3$, -OCH $_2$ F, and -OCH $_2$ F.